801 HYDRAULIC CEMENT

801.01 PORTLAND CEMENT

(A) GENERAL. Unless specified otherwise, portland cement shall be as specified in 801.01(B), except that for sewer and water work, portland cement shall be as specified in 801.01(C). The cement may be accepted on the basis of a manufacturer's certification furnished in accordance with the requirements of "Portland Cement Mill Certification Program, D.C. Department of Public Works" available from the Engineer of Materials and Research.

The temperature of the cement at time of delivery to the mixer shall not exceed 160°F.

Different brands of cement, the same brand of cement from different sources, or cements for which the chemical analysis indicates them to be of different types shall not be mixed for use on a project. Different brands of cement or the same brand of cement from different sources may be used alternately on a project only in case of an emergency and with the specific approval of the Engineer.

For portland cement used in concrete with aggregates that are deleteriously reactive, the alkaline content of the portland cement shall not exceed 0.60 percent as described in optional requirements of AASHTO M 85.

- **(B) STANDARD PORTLAND CEMENT.** Standard portland cement shall meet the requirements of AASHTO M 85, Type I.
- (C) MODERATE HEAT OF HYDRATION PORTLAND CEMENT. Moderate heat of hydration portland cement for sewer and water work shall meet the requirements of AASHTO M 85, Type II.
- **(D) HIGH EARLY STRENGTH PORTLAND CEMENT.** High early strength portland cement shall meet the requirements of AASHTO M 85, Type III.
- (E) WHITE PORTLAND CEMENT. Portland cement for white portland cement concrete shall meet the requirements of AASHTO M 85, Type I, except that the cement shall contain not more than one half of one percent (0.50%) of Ferric Oxide (Fe₂O₃) by weight.

801.02 MASONRY CEMENT

Masonry cement shall meet the requirements of AASHTO C 91, Type M unless otherwise specified.

Masonry cement may be accepted on the basis of a manufacturer's certification furnished in accordance with the requirements of Masonry Cement Mill Certification available from the Engineer of Materials and Research. Different brands of cement or the same brand of cement from different sources may be used alternately on a project in the case of emergency and with the approval of the Engineer.

801.03 BLENDED HYDRAULIC CEMENT

Blended hydraulic cement shall conform to AASHTO M 240 for Type IS or IP. A manufacturer's certification shall be furnished indicating the source, amount, and composition of the blended cement, and indicate that the material was tested during production or transfer in accordance with this specification, and a

report of the test results shall be furnished at the time of shipment.